### SUBPART C - EVALUATION OF CONSTRUCTION MATERIALS

MI512.21(d)(1)(i)

# MI512.21 NRCS-Michigan Evaluation Procedures for Used Materials

- (b) Materials may be reused when all of the applicable following conditions are met:
  - (1) The material or product is suitable for the use intended;
  - (2) The material or product meets the requirements of the specifications;
- (3) The material is evaluated for items 1 and 2 above by an NRCS-Michigan employee with design or construction engineering job approval authority for the practice(s) in which the material will be used or by a non-NRCS professional engineer licensed in the state of Michigan;
- (4) Rules for any program providing financial assistance for the practice(s) do not prohibit the use of used materials;
- (5) If the used material is metal pipe, the depth of fill over the pipe is less than six feet (an exception on the maximum depth may be made only by the state conservation engineer.);
- (6) The used material does not involve concrete blocks or utility poles which must restrain horizontal loads; and
  - (7) Coated metal waste storage facilities have been previously prequalified and:
    - (i) panels appear to be in good to excellent condition;
    - (ii) all bent and damaged parts are replace or repaired according to the manufacturer's recommendations;
    - (iii) used panels are cleaned before new joint sealer is applied;
    - (iv) all parts previously set in concrete are replaced;
    - (v) all bolts are replaced using the same type and grade as used in the original structure;
    - (vi) a warranty is received with the same provisions as a new structure or 10 years, whichever is less;
    - (vii) the structure is being reconstructed to the dimensions as previously prequalified or as acceptable to the manufacturer;
    - (viii) the reconstruction is performed by a franchised dealer for the company which supplied the original structure, <u>or</u> the reconstruction is performed by a dealer not franchised by the company which supplied the original structure provided the nonfranchised dealer submits structure relocation/reconstruction drawings and specifications for approval in the same manner as the original company;
    - (ix) installation is in accordance with the company's current installation manual, including cathodic protection.
  - (d) Material acceptance requirements for NRCS-Michigan
    - (1) For work to be installed by formal construction contract:
      - (i) All manufactured materials shall be accepted on the basis of manufacturer certification, test results, <u>and job-site visual inspection unless otherwise specified by the contract documents.</u>

# MI512.21(d)(1)(ii)

- (ii) All other materials may be accepted on the basis of job-site visual inspection unless otherwise specified by the contract documents.
- (2) For work constructed by other than formal contract (Division of Work, Force Account, Informal Agreement between landowner and contractor, etc.), materials shall be accepted on the basis of:
  - (i) Quality designation markings on the material (made by the manufacturer as a part of the manufacturing process) and job-site visual inspection, or
  - (ii) Certification in writing by the manufacturer that the material complies with the applicable specification (with the appropriate test results) and job-site visual inspection unless otherwise noted on the construction drawings or specifications, or
  - (iii) For materials that are not manufactured (fence posts, straw mulch, earthfill, etc.), acceptance is on the basis of job-site visual inspection.

### SUBPART F - AS-BUILT DRAWINGS

MI512.52(c)

# MI512.51 NRCS-Michigan Applicability

- (b) As-built construction drawings are to be prepared for all engineering works of improvement.
- 512.52 NRCS-Michigan Documentation and Disposition
- (a) For all works of improvement listed in sections (b), (c), and (d) below, the following is required:
- (1) As-built construction drawings shall be completed within 90 days of completion of construction.
- (2) As-built construction drawings shall be sent to the sponsor within 60 days after completion of the as-built construction drawings.
- (3) All as-built additions to the construction drawings shall be completed using red ink. All additions should be neat and clear. The as-built construction drawings should be on blackline or photocopy of the construction drawings.
- (b) ENGINEERING JOB CLASS V AND ABOVE DAMS AND CLASS I DIKES All items listed below shall be placed in a records container. This container will be permanently stored in the NRCS-Michigan state office files. After as-built construction drawings are completed, all working materials not listed below should be destroyed or returned to the sponsor.
  - (1) Original of as-built construction drawings
  - (2) Job diaries
  - (3) Survey books
  - (4) Design folder
  - (5) Documentation photographs
  - (6) Specifications and material certifications
  - (7) Operation and maintenance inspection reports
  - (8) Original construction drawings
  - (9) Contracting Officer Technical Representative contract folder
- (c) MAJOR STRUCTURAL WORKS OF IMPROVEMENT APPROVED BY THE STATE CONSERVATION ENGINEER AND STRUCTURES BUILT UNDER FORMAL CONTRACT OTHER THAN DAMS AND CLASS I DIKES Major structural works of improvement are defined as Engineering Job Approval Class V and above pump stations, class II dikes, floodwater diversions, and any other work of improvement as determined by the state conservation engineer. A formal contract is one that is formally bid (this does not include Force Accounts and Purchase Orders). A copy of the asbuilt construction drawings, original construction drawings, design folder, correspondence, and construction documentation shall be placed in a designated file in the NRCS-Michigan state office. These records shall be sent to the servicing NRCS-Michigan field office 10 years after construction is completed for distribution to the sponsor, landowner, or operator. Records for any of these works of improvement may be retained at the NRCS-Michigan state office at the discretion of the state conservation engineer. After as-built construction drawings are completed, all working materials not listed above shall be returned to the sponsor or destroyed.

## SUBPART F - AS-BUILT DRAWINGS

MI512.52(d)

- (d) CLASS V AND VI WORKS OF IMPROVEMENT APPROVED BY AREA ENGINEERS NOT INCLUDED IN THE DESIGNATIONS FOR (b) AND (c) ABOVE The design folder, correspondence, construction documentation, original construction drawings, and a copy of the as-built construction drawings shall be filed in the area office or field office as determined by the area engineer. These records shall be sent to the sponsor, landowner, or operator 10 years after construction is completed. Records for any of these works of improvement may be retained at the area office or field office at the discretion of the area engineer.
- (e) ALL OTHER ENGINEERING WORKS OF IMPROVEMENT As-built construction drawings are to be prepared for all other engineering works of improvement. As-built construction drawings and other construction documentation shall be filed in the servicing NRCS-Michigan field office. These records shall be sent to the sponsor, landowner, or operator when the design life of the works of improvement is completed. Records for any of these works of improvement may be retained at the field office at the discretion of the district conservationist.